

REMARKS**Summary of the Office Action**

Claims 1-6 and 8 stand rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter.

Claim 1 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

Claims 1, 2, 4, 7 and 8 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Ward (U.S. Patent No. 6,526,411) (hereinafter "Ward").

Claims 3 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ward in view of Seto et al. (U.S. Publication No. 2002/0041692) (hereinafter "Seto").

Claim 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ward in view of Cluts (U.S. Patent No. 5,616,876) (hereinafter "Cluts").

Summary of the Response to the Office Action

Applicants have amended claims 1, 7 and 8 to differently describe embodiments of the disclosure of the instant application's specification and/or to improve the form of the claims. Accordingly, claims 1-8 remain currently pending for consideration.

Rejection under 35 U.S.C. § 101

Claims 1-6 and 8 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Independent claims 1 and 8 have been amended to improve the form of the claims. For example, independent claim 8 has been amended to describe

a “computer readable medium storing a program ...” in accordance with the Examiner’s helpful suggestion at page 2, section 1 of the Office Action. Applicants respectfully submit, on the other hand, that claims 1 to 6 are directed to a method of searching for a piece of music which clearly falls within the statutory subject matter defined by 35 U.S.C. § 101.

At section 1 of page 2 of the Office Action, the Examiner also alleges that certain claimed subject matter “does not have a tangible result.” To the extent that this assertion might be deemed to still apply to the claims as newly-amended, Applicants respectfully disagree with it for at least the following reasons. Independent claim 1, for example, has been newly-amended to recite “selecting ... a plurality of pieces of music in descending order of the degree of similarity,” which is a tangible result. Similar amendments have also been made to independent claims 7 and 8.

Applicants respectfully submit that the claims in their current form fully comply with 35 U.S.C. § 101. Withdrawal of the rejections under 35 U.S.C. § 101 are thus respectfully requested.

Rejection under 35 U.S.C. § 112, second paragraph

Claim 1 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Applicants have amended claims 1, 7 and 8 in accordance with helpful suggestions provided by the Examiner at pages 2-3 of the Office Action.

The Examiner also alleges, at section 2, page 3 of the Office Action, that the terms “degree of similarity” and “high degree of similarity” in claims 1, 7 and 8 are “relative terms that render the claim indefinite.” The Examiner goes on to allege that the terms “degree of

similarity” and “high degree of similarity” are “not defined by the claim” and that “the specification does not provide a standard for ascertaining the requisite degree.” Applicants have removed all instances of “high degree of similarity” from the claims in light of the Examiner’s comments. However, it is respectfully submitted that the term “degree of similarity” is not indefinite because it is similar to the term “similarity” which is clearly understood as referring to how similar two pieces of information are to each other. In addition, this concept of “degree of similarity” is well known in the subject art of music searching methodology as evidenced, for example, by the three Japanese references submitted in the concurrently filed Information Disclosure Statement, discussed in more detail in the following paragraphs.

It appears that the Examiner believes that the specification does not provide a standard for ascertaining the requisite degree of similarity. While Applicants are not certain of the Examiner’s exact position in this regard, it appears that the Examiner believes that the specification does not disclose how to calculate a degree of similarity of a piece of music to a representative piece of music.

In response, Applicants respectfully submit that the specification of the instant application specifically describes that “using these characteristics (music characteristics), the degree of similarity is calculated.” See, for example, page 11, lines 19 to 20 of the instant application’s specification. The specification also describes that the musical characteristics are numerical values where the beat cycle and beat intensity of music, and the rate of change of these are calculated, and it is possible to calculate using a well known method. See, for example, page 11, lines 15 to 19 of the instant application’s specification. Also, the specification describes that the degree of similarity between the selected music X1 and an optical music Y1 can be expressed

as a correlation $R(X1, Y1)$ of the characteristics. See, for example, page 11, lines 22 to 25 of the instant application's specification.

To the extent that one might take the position that the specification does not identify any specific known methodology or description of how to calculate the correction function R , such a methodology is well known in the subject art of music searching technology. For example, Applicants are concurrently filing the above-discussed Information Disclosure Statement with the instant Amendment that cites to three Japanese references, that is, JP 2004-184769 A (corresponding to US 2004/0255759 A), JP 2005-173938 A (corresponding to US 2005/0126371 A) and JP 2002-278547 A (corresponding to US 2002/0172372) A) as evidence that such methodologies are well known.

JP 2004-184769 A discloses calculating a similarity between pieces of music data from consecutive chords and attributes of the chords. JP 2005-173938 A discloses calculating a similarity between songs based on song feature information and calculating a distance in a feature amount between songs. JP 2002-278547 A discloses calculating a similarity between pieces of music.

Accordingly, for at least the foregoing reasons, Applicants respectfully submit that claims 1, 7 and 8, as amended, fully comply with the requirements of 35 U.S.C. § 112, second paragraph. Accordingly, Applicants respectfully request that the rejections under 35 U.S.C. § 112, second paragraph be withdrawn.

Rejections under 35 U.S.C. § 102(e) and 103(a)

Claims 1, 2, 4, 7 and 8 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Ward. Claims 3 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ward.

in view of Seto. Claim 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ward in view of Cluts. Applicants have amended claims 1, 7 and 8 to differently describe embodiments of the disclosure of the instant application's specification. To the extent that these rejections might be deemed to apply to the claims as newly-amended, they are respectfully traversed for at least the following reasons.

Applicants have amended each of independent claims 1, 7 and 8 to describe additional features with regard to "stimulation coefficients." Such features, as described in the newly-amended claims, are neither disclosed, nor suggested, by the cited references in this application.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. §§ 102(e) and 103(a) should be withdrawn because none of Ward nor Seto nor Cluts, whether taken singly or combined, teach or suggest each feature of independent claim 1, 7 or 8, as amended. As pointed out in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987)." Similarly, MPEP § 2143.03 instructs that "[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 409 F.2d 981, 180 USPQ 580 (CCPA 1974)." Furthermore, Applicant respectfully asserts that dependent claims 2-6 are allowable at least because of their dependence from claim 1 and the reasons set forth above.

CONCLUSION

In view of the foregoing, Applicants submit that the pending claims are in condition for allowance, and respectfully request reconsideration and timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution. A favorable action is awaited.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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